

Homework by KTK Data Table for
05_dataPipelines

parallel_threads	prefetch_buffer_size	mean image/s	standard deviation
8	8	1080.59	357.44
8	16	1091.38	115.03
8	32	1147.72	221.39
8	64	922.57	345.99
16	8	1129.45	238.51
16	16	1212.86	85.3
16	32	1071.12	81.3
16	64	810.26	254.39
32	8	1021.45	150.99
64	8	629.42	121.5
128	8	645.05	210.05
128	16	512.59	17.09
128	32	565.91	52.95
128	64	504.04	36.51
128	128	504.11	39.76
128	256	383.42	77.63
256	256	396.06	162.1
512	256	445.69	29.07

Comments: Increasing "parallel_threads" helps only upto a point, such as increase from 8 to 16, after that the number of images processed per second goes down. Increasing "prefetch_buffer_size" does not seem to help to increase the "mean images/s" processed. For a given number of "parallel_threads" the mean image/s increases with the increase in the prefetch_buffer_size upto a point about two to three times the number of parallel_threads after that the performance goes down. It is not quite clear to me why the performance would go down with increase in the prefetch_buffer_size.